

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A medical composition,
comprising:

a peptide capable of being labeled with a metal and
a basic organic compound acceptable as a
pharmaceutical additive wherein the basic organic compound is
a basic amino acid or a basic compound having an imidazole
ring wherein the peptide capable of being labeled with a metal
is a compound represented by chemical formula (1):

Z-Y-Leu-Phe-(X)_n-Lys(NH₂)_m-ε(-(R)o-(T)l-U) (1)
wherein in formula (1),

Z represents a protecting group for an amino group;

Y represents Met or Nle;

in (X)_n, X represents a spacer consisting of one or more
amino acids or a compound capable of being organically
synthesized, and n represents 1 or 0;

in (NH₂)_m, NH₂ represents an amide group serving as a
protecting group for an α-carboxyl group of Lys, and m
represents 1 or 0; and

in ε(-(R)o-(T)l-U), R represents Ser or Thr bound via
amide bond with an ε-amino group of Lys,

o represents 1 or 0,

T represents a spacer consisting of one or more amino

acids or a compound capable of being organically synthesized,
1 represents 1 or 0, and U represents a group capable of being
labeled with a metal,
provided that X and T may be identical or different.

Claims 2 and 3 (canceled).

4. (currently amended): The medical composition according to claim 31, wherein the basic amino acid is one or more members selected from arginine, histidine, and lysine.

5. (currently amended): The medical composition according to claim 31, wherein the basic compound having an imidazole ring is imidazole.

6. (currently amended): The medical composition according to ~~any of claims 1 to 5~~claim 1, wherein the peptide capable of being labeled with a metal is a peptide available as an active ingredient in a diagnostic drug or a pharmaceutical drug for therapeutic use.

7. (currently amended): The medical composition according to ~~any of claims 1 to 6~~claim 1, wherein the peptide capable of being labeled with a metal has 30 or less amino acid residues or a molecular weight of 4500 or less.

8. (original): The medical composition according to ~~any of claims 1 to 7~~claim 1, wherein the peptide capable of being labeled with a metal is a leukocyte-binding compound.

Claim 9 (canceled).

10. (currently amended): The medical composition according to claim 91, wherein in chemical formula (1), U represents a group capable of being labeled with a metal

selected from a tripeptide capable of being labeled with a metal, dipeptide-mercapto-acylate, a nitrogen-containing cyclic compound having 8 to 20 carbon atoms, a nitrogen-containing cyclic carboxylic acid compound having 8 to 20 carbon atoms, a derivative of a nitrogen-containing cyclic carboxylic acid compound having 8 to 20 carbon atoms, and alkylene-amine-carboxylic acid having 4 to 10 carbon atoms.

11. (currently amended): The medical composition according to claim ~~9~~ or 10, wherein in chemical formula (1), U represents a group capable of being labeled with a metal selected from -Cys-Gly-Asp, -Cys-Asp-Asp, -Cys-Asp-Gly, -Cys-Gly-Glu, -Cys-Glu-Glu, -Cys-Glu-Gly, -Cys-Gly-Asn, -Cys-Asn-Asn, -Cys-Asn-Gly, -Cys-Gly-Gln, -Cys-Gln-Gln, -Cys-Gln-Gly, -Cys-Gly-Lys, -Cys-Lys-Lys, -Cys-Lys-Gly, -Cys-Gly-Arg, -Cys-Arg-Arg, -Cys-Arg-Gly, -Asp-Asp-mercaptoacetyl, -Gly-Asp-mercaptoacetyl, -Gly-Gly-mercaptoacetyl, 1,4,7,10-tetraazacyclododecane (Cyclen), 1,4,8,11-tetraazacyclotetradecane (Cyclam), 1,4,8,12-tetraazacyclopentadecane, 1,4,8,11-tetraazacyclotetradecane-5,7-dione (Dioxocycam), 1,4,8,11-tetraazacyclotetradecane-1,4,8,11-tetraacetic acid (TETA), 1,4,7,10-tetraazacyclododecane-N,N',N'',N'''-tetraacetic acid (DOTA), 1,4,8,11-tetraazacyclotetradecane-5,7-dione-N,N',N'',N'''-tetraacetic acid, 1,4,7,10-tetraazacyclododecane-butyric acid, 1,4,8,10-tetraazacyclododecane-butyric acid, 1,4,7,10-tetraazacyclododecane-1-aminoethylcarbamoylmethyl-4,7,10-tris[R,S]-methylacetic acid (DO3MA), 1,4,7,10-

tetraazacyclododecane-1,4,7,10- $\alpha,\alpha',\alpha'',\alpha'''$ -tetramethylacetic acid (DOTMA), ethylenediaminetetraacetic acid (EDTA), diethylenetriaminepentaacetic acid (DTPA), triethylenetetraminehexaacetic acid and ethylene glycol-(2-aminoethyl)-N,N,N',N'-tetraacetic acid (EGTA).

12. (currently amended): The medical composition according to ~~any of claims 9 to 11~~claim 10, wherein in chemical formula (1), Z represents a formyl group.

13. (currently amended): The medical composition according to ~~any of claims 1 to 12~~claim 1, wherein the peptide capable of being labeled with a metal is selected from N-formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH₂)- ϵ (-Ser-Cys-Gly-Asn) (SEQ ID NO:1),

N-formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH₂)- ϵ (-Ser-Cys-Gly-Asp) (SEQ ID NO:2),

N-formyl-Nle-Leu-Phe-Nle-Tyr-Lys- ϵ (-Ser-Cys-Asp-Asp) (SEQ ID NO:3),

N-formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH₂)- ϵ (-Ser-D-Arg-Asp-Cys-Asp-Asp) (SEQ ID NO:4),

N-formyl-Nle-Leu-Phe-Nle-Tyr-Lys(NH₂)- ϵ (-Ser-D-Arg-diethylenetriaminepentaacetic acid (DTPA)) (SEQ ID NO:5),

N-formyl-Met-Leu-Phe-Lys- ϵ (-Asp-Asp-mercaptoacetyl) (SEQ ID NO:7),

N-formyl-Met-Leu-Phe-Lys- ϵ (-Gly-Asp-mercaptoacetyl) (SEQ ID NO:8), and

N-formyl-Met-Leu-Phe-Lys- ϵ (-Gly-Gly-mercaptoacetyl) (SEQ ID NO:9).

14. (currently amended): The medical composition according to ~~any of claims 1 to 13~~claim 1, wherein the composition further comprises one or more additives selected from a reductant, pH adjuster, surfactant, hydrophilic organic solvent, and stabilizer.

15. (currently amended): A freeze-dried medical composition characterized in that the composition is obtained by freeze-drying a medical composition according to ~~any of claims 1 to 14~~claim 1.

16. (currently amended): A medical preparation characterized in that the preparation is obtained by labeling, with a metal, a peptide capable of being labeled with a metal in a medical composition according to ~~any of claims 1 to 15~~claim 1.

17. (original): The medical preparation according to claim 16, wherein the metal is a radioactive metal or paramagnetic metal.

18. (original): The medical preparation according to claim 17, wherein the radioactive metal is selected from Tc-99m, In-111, Ga-67, Y-90, Sn-117m, Sm-153, Re-186, and Re-188.

19. (original): The medical preparation according to claim 17, wherein the paramagnetic metal is selected from Gd, Fe, Mn, Cu, and Dy.

20. (original): A method for labeling, with a metal, a peptide capable of being labeled with a metal, comprising the steps of:

dissolving the peptide in an aqueous solvent of a basic

organic compound; and then

labeling the resulting product with a metal.

21. (original): The metal-labeling method according to claim 20, wherein the peptide capable of being labeled with a metal is a peptide insoluble or poorly soluble in an aqueous solvent.

22. (currently amended): The metal-labeling method according to claim 20 ~~or 21~~, wherein the basic organic compound is a basic amino acid or a basic compound having an imidazole ring.

23. (original): The metal-labeling method according to claim 22, characterized in that the basic amino acid is one or more members selected from arginine, histidine, and lysine.

24. (original): The metal-labeling method according to claim 22, wherein the basic compound having an imidazole ring is imidazole.

25. (currently amended): The metal-labeling method according to ~~any of claims 20 to 24~~ claim 20, characterized in that the metal is a radioactive metal or paramagnetic metal.

26. (original): The metal-labeling method according to claim 25, wherein the radioactive metal is selected from Tc-99m, In-111, Ga-67, Y-90, Sn-117m, Sm-153, Re-186, and Re-188.

27. (original): The metal-labeling method according to claim 25, wherein the paramagnetic metal is selected from Gd, Fe, Mn, Cu, and Dy.

28. (currently amended): A method for producing a medical preparation comprising a metal-labeled peptide, characterized

PRELIMINARY AMENDMENT

Q96699

U.S. Appln. No.: unassigned (§371 of PCT/JP2005/005182)

by using a metal-labeling method according to ~~any of claims 20~~
~~to 27~~claim 20.